

AD A091620

DDC FILE COPY

UNCLASSIFIED
SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER GS-2	2. GOVT ACCESSION NO. AD-A091620	3. RECIPIENT'S CATALOG NUMBER (9)
4. TITLE (and Subtitle) BEHAVIORAL STRATEGIES FOR ENHANCING PRODUCTIVITY		5. TYPE OF REPORT & PERIOD COVERED Technical Report
6. PERFORMING ORG. REPORT NUMBER GS-2		7. CONTRACT OR GRANT NUMBER(s) N00014-79-C-0680 N00014-79-C-0750
8. AUTHOR(s) Gary Latham L. L. Cummings / & Terence R. Mitchell		9. PERFORMING ORGANIZATION NAME AND ADDRESS Graduate School of Business Administration University of Washington Seattle, WA 98195
10. CONTROLLING OFFICE NAME AND ADDRESS Organizational Effectiveness Research Programs Office of Naval Research (Code 452) Arlington, VA 22217		11. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS NR 170-890
12. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		13. REPORT DATE July 1980
14. SECURITY CLASS. (of this report) Unclassified		15. NUMBER OF PAGES 41
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.		17. SECURITY CLASS. (of this report) Unclassified
18. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		19. DECLASSIFICATION/DOWNGRADING SCHEDULE
20. SUPPLEMENTARY NOTES		
21. KEY WORDS (Continue on reverse side if necessary and identify by block number) attribution theory behavioral consequences behavioral observation scales critical incident technique (continued on reverse)		
22. ABSTRACT (Continue on reverse side if necessary and identify by block number) A three stage process is proposed for enhancing productivity through the utilization of human resources. The stages comprising the process are: (1) identifying poor performance; (2) deciding what causes poor performance; and (3) coping with poor performance. Together these strategies form a performance enhancement system. Strategies for identifying a poor performance include examining discrepancies between goals and measured achievement, making comparisons across people, (continued on reverse)		

DD FORM 1473
1 JAN 73EDITION OF 1 NOV 65 IS OBSOLETE
S/N 0102-LF-014-6601

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

401855 80 10 14 199

19. feedback
goal setting
job analysis
performance appraisal
performance definitions
productivity
rating errors

20. units or organizations, and making comparisons across time.

A model for diagnosing and responding to poor performance is presented based on attribution theory. Empirical results in support of the model are discussed.

Steps for coping with poor performance include (1) defining performance behaviorally, (2) training managers to minimize rating errors, (3) setting specific hard goals, and (4) ensuring that the consequences of working toward and attaining the goals are positive for the employee.

Accession For
NTIS CARD
DELO
Unauthenticated
JAN 11 1971
By
DATE
APR 11 1971
A

Behavioral Strategies for Enhancing Productivity

Gary Latham¹

Graduate School of Business Administration
University of Washington
Seattle, Washington 98195

L.L. Cummings²

Graduate School of Business
University of Wisconsin-Madison
Madison, Wisconsin 53706

Terence R. Mitchell³

Graduate School of Business Administration
University of Washington
Seattle, Washington 98195

¹Order of authorship was determined by a random draw--all three authors contributed equally to the manuscript. Professor Latham acknowledges the support of the Office of Naval Research, Contract No. N00014-79-C-0680.

²Professor Cummings wishes to acknowledge the support of the Office of Naval Research, Contract No. N00014-79-C-0750.

³Part of the research discussed in this paper was supported by the Army Research Institute Contract No. DDA 903-79-C-0543 and The National Science Foundation Grant No. DAR 79-09792 (Terence R. Mitchell and Lee Roy Beach, Principal Investigators).

BEHAVIORAL STRATEGIES FOR ENHANCING PRODUCTIVITY

America is in trouble. The competitive spirit has caught-on around the world and we are no longer the leaders in productivity gains--indeed, it would be argued that we are dangerously close to being out of the game! Recently, the Bureau of Labor Statistics published some unsettling data. Of seven leading industrial nations, the United States ranked sixth in productivity increases from 1968 to 1978. According to the study, the rankings are:

	1968-1978 Productivity <u>Increases</u> ¹
1. The Netherlands	93.7%
2. Japan	89.1
3. West Germany	63.8
4. France	61.8
5. Italy	60.1
6. United States	23.6
7. United Kingdom	21.6

Increasingly, top level executives involved in strategic decision making are beginning to emphasize the importance of an organization's human resources for enhancing productivity. Many approaches can be taken to develop human resources. These range from improving work methods to improving the quality of life at work. Before selecting a particular tactic a systematic perspective on the causes of good and poor performance is necessary. Without such a perspective, productivity improvement techniques may be promoted and erroneously accepted without sufficient documentary

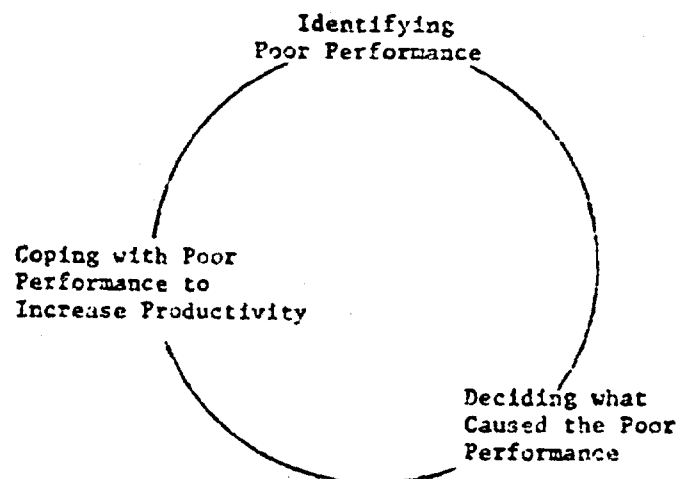
¹ Source: Bureau of Labor Statistics, United States Department of Labor, 1979.

evidence of their effects and generalizability across industries.

This article presents such a perspective. A three stage process is proposed for enhancing productivity through the utilization of human resources. The stages comprising the process are:

1. Strategies for identifying poor performance
2. Strategies for deciding what causes poor performance
3. Strategies for coping with poor performance

Together these strategies form a performance enhancement system. This system is depicted in Figure 1:



IDENTIFYING POOR PERFORMANCE

How should managers go about identifying problems? How do they? In many cases the answers to these two questions are not the same. Basically, we can refer to an ideal approach concerning how managers should identify problems as a rational approach to problem identification. In contrast, we can think of the descriptive posture concerning how managers actually do

BEST AVAILABLE COPY

identify performance problems as a conditionally rational approach subject to the limitation of managers as processors of information and as decision makers. There is emerging evidence indicating that the processes actually used by managers in formulating and identifying performance problems are not always completely rational.² Hopefully, a better understanding of what we actually do can lead to the development and implementation of strategies that will bring us closer to what we should do.

Typical Evaluation Procedures

This section will describe the two most prevalent systems for evaluating performance in today's organizations: the use of performance outcomes, and personality traits. We will then describe the judgment processes underlying the use of rational procedures in identifying performance problems. This is followed by a description of several limitations to the use of these rational processes.

Performance Outcomes

Senior level management, stockholders and consumers are generally concerned with performance outcomes as measures of an individual's level of productivity. That is, they are concerned with cost-related measures such as profits, costs, product quantity and quality, returns on investment, etc. The person who scores well on these measures is presumed to be highly

² Mintzberg, Henry. The Nature of Managerial Work, published originally by Harper and Row, 1973; 1980 edition published by Prentice-Hall, Inc., Englewood Cliffs, N.J., Chapters 3, 4 and 5; Mintzberg, Henry, D. Raisinighani and A. Theoret. "The Structure of 'Unstructured' Decision Processes," Administrative Science Quarterly, Vol. 21, No. 2, June 1976, pp. 246-275; Ackoff, Russell L. The Art of Problem Solving, John Wiley and Sons, New York, N.Y., 1978; Lyles, Marjorie A. and Ian I. Mitroff. "Organizational Problem Formulation: An Empirical Study," Administrative Science Quarterly, Vol. 25, No. 1, March 1980, pp. 102-119.

motivated toward performance improvement. The person who has received adequate resources including training to do the job, but performs poorly on these measures, is presumed to be poorly motivated.

Performance outcomes may serve as an excellent thermometer of an organization's health or effectiveness, but they are generally inadequate measures, by themselves, of an individual employee's job effectiveness. In fact, they can even be demotivating, if not destructive, for both the individual and the employer for the following reasons.

First, cost-related measures are often affected by factors over which an individual employee has little or no control. The performance of one individual is often causally affected by the performance of other individuals. It is not only unfair, but it can be illegal to distribute organizational rewards and punishments (e.g., promotion, transfer, demotion, dismissal, bonus, etc.) on the basis of measures over which an employee has minimal control.

Second, these measures are often deficient in that they omit important aspects of a person's job. For example, a superintendent in one district may loan equipment to a superintendent in another district. The result may be an increase in profits for the company, but an increase in costs for the superintendent who loaned the equipment. The poor memory of a superior and the lack of completeness of the accounting system which "keeps score" may lead to the identification of a "winner" and a "loser" rather than the behaviors of two team players who contributed to the overall profits of the company.

Third, these measures can encourage a results-at-all-costs mentality that can run counter to corporate ethics policies, not to mention legal

requirements. Moreover, a results-at-all-costs mentality can run counter to the overall productivity of the organization. In the above example, loaning equipment hurt the monthly cost sheet of the loaner, but it significantly increased the profits of the organization. The reverse might have been true if the individual had adhered to a "my own results at all costs" philosophy.

Fourth, cost-related measures are difficult to obtain for most white-collar jobs. For example, a cost-related measure of a logging cutter's effectiveness might be the number of trees cut divided by the number of hours worked. But, what cost-related measures exist for a personnel manager, engineer, or newspaper reporter?

Finally, and most importantly, from a performance improvement standpoint, economic measures or performance outcomes do not inform the employee what he or she needs to do to maintain or increase productivity. For example, telling a baseball player that he just struck out will not come as a surprise to him. He already has that information. Stopping with the identification of poor performance is insufficient! What the player needs to know is what he must do to at least get on first base and possibly hit a home run.

Traits

For one or more of the above reasons, 90 percent of today's organizations measure an employee's effectiveness in terms of traits or distinguishing qualities of people which individuals in the organizational hierarchy believe are desirable, rather than on cost-related outcomes. These trait measures generally include such concepts as commitment, creativity, loyalty,

initiative and the like. The problem with traits, from a productivity standpoint, is twofold. First, telling a person to "be a better listener" or to "show more initiative" may be excellent advice, but it doesn't tell the person what to do to implement this advice. Before such discussions motivate the employee to behave appropriately, traits must be defined explicitly.

Second, trait measures are looked upon unfavorably by the courts when decisions based upon them have adversely impacted people who are members of a protected class. This is because, in the words of one court decision, traits are susceptible to partiality and to the personal taste, whim, or fancy of the evaluator.³ As Peter Drucker has said:

An Employee owes no 'loyalty'; he owes no 'love'; and no 'attitudes'--he owes performance and nothing else. . . . Management and manager development should concern themselves with changes in behavior likely to make a man more effective.

Rationally Identifying Performance Problems

The above two approaches to assessing performance represent the most frequently employed techniques currently used in industry. Notice that both techniques tell the subordinate very little about what he or she has done wrong and how to correct it. Also, evaluations in cost terms or traits are frequently global and removed from what the subordinate actually does.

In this section we will describe some less frequently used procedures that are based on more rational models. These techniques represent attempts to describe more specifically what the subordinate is doing incorrectly. The heart of these rational approaches is to make evaluations based upon comparisons.

³ Wade v. Mississippi Cooperative Extension Service, 372 F. Suppl 120 (1974), 7 EBF 2186.

⁴ Drucker, P. Management: Tasks, responsibilities, and practices. New York: Harper and Row, 1973.

Of course, the comparisons can be of different types, and the types serve to distinguish three definitions of performance problems. They also serve to establish three ways of assessing or increasing a performance problem. The key in each approach is to discover a performance gap. The approaches differ with reference to the components compared in discovering this gap.

Discrepancy Between Goals and Measured Achievement

In many cases, identifying a performance problem consists of comparing an a priori goal with actual performance. For example, one could compare the number of cars a salesperson sold in a given month with the agreed upon goal regarding cars to be sold that month. A discrepancy between the two numbers represents a performance gap. This approach in identifying performance problems is frequently emphasized in performance improvement programs such as management by objectives, work planning and review, and other results oriented management strategies. As an approach to identifying performance problems, it works best when several important conditions are true:

1. Performance goals can be defined in measurable terms.
2. The goals are not contradictory; that is, one performance goal is not attained at the expense of another (e.g., increasing quantity of performance at the expense of quality).
3. The employee's performance can be measured in units identical to the way the goal is expressed (e.g., number of cars sold versus number of cars that were supposed to be sold).

In many cases these three conditions cannot be met. For example, a salesperson might be urged to develop sustained, long-term relations with customers while simultaneously being compensated for short-term, quarterly sales results. When performance is multidimensional, as it is in most, if not all, complex jobs, identifying performance gaps between the goals set and actual performance can lead to the identification of performance areas that are being emphasized to the detriment of other equally important areas.

Finally, while it may be feasible to establish goals in quantifiable terms, numerous measurement problems may hamper the actual assessment of an individual's performance in relation to these goals. For example, while it may be necessary to reduce scrappage by 15 percent, scrappage may be affected in multiple ways by one or more groups let alone people within a group. Thus, documenting an individual's performance can prove difficult. This is especially true when the emphasis on measuring an individual's performance is on performance outcomes.

Comparisons Across People, Units, or Organizations

Because of the problems encountered with a goal-achievement discrepancy approach to identifying performance problems, it is not infrequent to find managers comparing individuals, divisions or organizations with one another. This results in a ranking of performance such that those with the lowest ranking are identified as having performance problems. This can be achieved, and frequently is, without the articulation of specific, measurable performance goals for any particular individual, division or organization. The comparison is made on the basis of performance relative to others--not on the basis of a gap between the goals set and performance in relation to goals. However, combining different dimensions of job performance and measuring achievement on each dimension frequently poses a problem. For example, even though two managers may agree that individuals X and Y are "poor" supervisors relative to others, such comparisons, even if the two managers agree on their overall or global rankings, are not particularly helpful in diagnosing the causes of poor performance. As we shall note in a later section, these two managers may well attribute high or low performance to quite different causes even though they agree on the ranking of the overall performances of the individuals. These attributions can be crucial in deciding what to do to sustain high performance and/or improve low performance.

Comparisons Across Time

Single individuals, units, or organizations can be compared with themselves across time. This type of comparison implies that the definition of poor performance is declining performance (and good performance is increasing). As long as the same dimensions of performance are compared across time, this approach avoids both the first and second problems identified earlier. Of course, performance still must be measurable in units that are meaningful and understandable for the person who is being measured. But, goals and agreement among managers with reference to a performance ranking are not necessary with this approach.

While the constraints upon using this approach are less than those associated with the first two, this approach is susceptible to naive application and gross myopia. Frequently, increasing performance may not indicate success or even survival (e.g., when the competition is improving at an even more rapid rate). It is also the case that decreasing performance may not be dysfunctional (e.g., when an individual's performance decrement is necessary in order to prevent overload and possible detrimental stress). In the latter case, a short-term performance decline may even be necessary to insure long-run survival and continued productivity.

In summary, each of these three approaches to identifying performance problems assumes that performance is measurable. Each assumes that some standard for assessment exists or can be derived. In the first case, the standard consists of well defined, quantifiable goals. In the second, the standard is the performance of another individual, unit, or organization. In the third, the standard is previous performance.

However, there are problems with these procedures. In many cases, a manager may have biased information or inadequate information. In other cases,

the information processing required (i.e., multiple comparisons across time and people) may be too demanding without technical aids. We need to be aware of these human limitations and how to overcome them before we discuss the practical implications of what is known about deciding about the causes of low performance and coping with such.

Human Limits on Identifying Performance Problems

The limitations of the processes described above emphasize problems of measurement and conflicting performance dimensions. In addition, there are characteristics of the person that constrain the identification of performance problems. When these characteristics influence managers as they diagnose performance, they serve to move the diagnosis toward nonrational, less systematic, more intuitive modes. What are some of these constraining characteristics?

First, it is frequently the case that managers are willing to accept a satisfactory, perhaps even the first satisfactory, identification of a performance problem. Maximizing search and diagnosis in the pursuit of a complete identification may not be cost effective. Moreover, such a completely rational analysis may not even be humanly possible when managers are confronted with a multitude of performance symptoms and a wide array of possible causes of poor performance. The managerial world is one of frequent interruptions, rapid reordering of priorities, political subtleties and considerable time pressures. To manage in such a world is to satisfy, compromise and operate with flexible goals. The comparison processes necessitated by each of the three previous approaches may not be feasible in many day-to-day managerial situations.

Second, goals and the assessment of performance problems are not always the genesis for managerial action. In fact, they frequently become "after

the fact" rationalizations or justifications for what has already occurred. This displacement of goals and performance definitions is frequently observed when managers justify a salary increase or promotion decision (which has already been made on other than performance grounds) by appealing to selective cases of high performance which have not been carefully documented and certainly not defined a priori. In other words, goals and definitions of desirable performance are derived from observations of performance rather than established prior to instruction, guidance and other managerial actions aimed at producing high performance.

Third, goals and definitions of performance/performance problems are usually subject to varying interpretations as a function of managers' values, beliefs, and experiences. It is seldom the case that a single manager with a single goal is allowed by the organization to define a problem solely from his/her perspective. Rather, managers with varying and even conflicting values and objectives derive a definition of what is expected and what constitutes a significant performance problem. Once different groups with differing perspectives enter the arena, political, bargaining and negotiating skills become crucial in evolving performance definitions. With these forces set in motion, the analytical, systematic and logical processes of comparison required by the three rational perspectives become less feasible. At a minimum, the realities of multiple parties with multiple objectives result in more diffuse and less certain definitions of performance. What is and what is not a performance problem is defined by different groups by processes of negotiation, bargaining, and political behavior.

Fourth, performance goals and problems are not static, frozen or rigid. Rather, important performance problems tend to shift, to be unstable, to be dynamic. In growing organizations, particularly at the top, the expected dimensions of performance shift over time, occasionally even in unpredictable ways. This instability and dynamism mean that rational approaches would need to make continuous comparisons, adjusting for changing environmental inputs. Such a requirement is clearly unfeasible and unrealistically costly in many organizations. Thus managers satisfy, justify, rationalize in the face of such realities. To fixate on single, static measures of performance can embed a manager in a quagmire of rigidity and frozen action. In order to maintain needed flexibility, complete rationality and thorough systematization are frequently resisted by wise managers.

When we combine these all-too-human characteristics, an image of the effective manager emerges as a person who is flexible, dynamic, possessed of limited information processing capacity, willing to compromise and bargain and, most of all, is subject to major constraints in identifying performance gaps and establishing performance goals. Does this mean that careful analysis of performance problems is impossible? That systematic approaches to enhancing performance are impossible? That meaningful goals cannot be set? That there is little to offer managers in their efforts to correct performance deficiencies? Clearly, the answer to these questions is an emphatic "no!" However, it is equally clear that if normative, purely rational comparative perspectives on identifying performance problems are to be of help, we must understand and account for the underlying realities of decision making about performance problems.

Thus, we now move to a discussion of several new and exciting findings about how humans go about the difficult, complex task of deciding the causes of a performance problem once it has been identified through either systematic or more loosely defined and intuitive processes. The bottom line is doing something about a performance gap. And what one does depends heavily upon what one assumes to be causing the performance deficiency. As we are about to see, causes and assumptions about causes are not obvious in the world of performance appraisal.

DECISIONS ABOUT CAUSES OF POOR PERFORMANCE

The previous section described the problems of defining performance, especially substandard performance. As we noted, there are frequent and recurring shortfalls between what should be done and what actually happens. In the next two sections we move to the second stage of the process. From the manager's perspective we will describe how managers deal with poor performance problems. That is, given that poor performance has occurred, how does the manager decide 1) what the problem is and 2) what to do about it. From the subordinate's perspective we will discuss how poor performance feedback is received, evaluated and acted upon.

What happens when a manager or supervisor observes or is informed of a subordinate's poor performance? That is, given that the manager has knowledge of the problem, how does he or she proceed to remedy it?

The literature (up until recently) related to this question has been rather sparse and tends to be of a descriptive or personal experience nature. There seems to be agreement that certain violations demand an immediate and punitive response. For example, theft, falsification of

records, fighting with the supervisor, or flagrant insubordination usually result in severe reprimands, probation, and/or termination.⁵ In many cases, this response is dictated by company policy and the supervisor really has very little discretion over how to respond to the issue.

However, most cases are not so clear-cut. What usually happens is that a subordinate misses a deadline, is tardy or absent occasionally, does not work overtime when needed, engages in horseplay, does sloppy work or some other less extreme violation of expected behavior. The task of the supervisor or manager is more complex in these settings, simply because there are few clear prescriptions or rules about how to proceed.

Probably the first thing that happens in cases for which no clear policy exists is that the supervisor tries to determine why the behavior occurred. In trying to ascertain the cause of the poor performance, the supervisor may solicit information from a variety of sources including the subordinate in question. After this information is gathered, it must be processed, sorted, and evaluated and eventually some sort of reason or reasons are judged to be the contributing factors. For example, the poor performance might be due to a low skill level, a lack of motivation, poor instructions or insufficient support services.

After the cause is determined, the supervisor will usually select some course of action that fits the believed cause. So, for example, if the subordinate's poor performance is seen as being caused by low motivation, the supervisor might engage in a formal discipline procedure and verbally reprimand the employee. If, on the other hand, the reason is seen as

⁵ Wheeler, H. N. Punishment theory and industrial discipline. Industrial Relations, May 1976, 235-243. This paper reviews the typical offenses and managerial actions involved in cases of industrial discipline.

insufficient information or support, the supervisor might institute changes in the work setting and if ability is seen as the cause, training might be appropriate.

There are two key points about the process described above which need to be highlighted. First, it is a two-stage process. There is a diagnosis phase where the supervisor determines the cause of poor performance, and there is a decision phase where a response is selected from a set of alternatives. Second, we must recognize that this process entails active information processing on the part of the supervisor. Therefore, simply having good performance appraisal instruments or prescribed disciplinary procedures is not enough. In order to understand what is happening and how poor performance can be handled more effectively, we must understand this evaluation process more fully.

A Model of Diagnosing and Responding to Poor Performance

The model which is presented here is designed to represent the two-stage process described above. The foundations for its development come from a variety of sources and more detailed discussions of this literature can be found elsewhere.⁶ However, the most important point that needs to be emphasized is that the assumptions and hypotheses built into the model were mostly generated from social psychological research on attribution theory rather than from the literature on industrial discipline or performance appraisal. A brief review of attribution theory and its relevance for performance appraisal issues can provide a better understanding of much of what follows.

Attribution theory is essentially a theory about people's naive assumptions about the causes of their own behavior and the behavior of others. All of us

⁶ Green, S. G. and Mitchell, T. R. Attributional processes of leaders in leader-member interactions. Organizational Behavior and Human Performance, 1979, 23, 429-458. This is a review of the attribution literature applied to the leadership setting.

try to figure out both why we did things or why other people did what they did. The process of determining the causes of behavior is called an attribution process--we attribute our behavior or other people's behavior to various types of causes. By engaging in this attribution process, we provide order and understanding to our prediction of our own and others' actions.

The contributions of attribution theory to the problem of performance evaluation are threefold. First, research on the attributional process has shown that people are fairly systematic in their diagnoses of behavior. We know a fair amount about what sort of information is processed and how it is processed. Second, we have learned that there are a number of both rational and less rational activities that go on. Some of these "errors" in the attributional process are built into our model. Third, one major distinction that has been exceptionally helpful has been the idea that causes of behavior can be seen as falling into two major classes: internal and external. Internal causes are something about the person--their abilities, effort, personality and mood. External causes are something about the setting--task difficulty, available information, interpersonal pressures. Obviously, whether a supervisor makes an internal or external attribution about the causes of poor performance is critical for understanding what response will be selected.

The model is presented in Figure 1. One can see that the two main stages are labeled links 1 and 2. Link 1 refers to the process of making an attribution and link 2 refers to the process of choosing an appropriate response. For both of these stages there are some rational factors and some biases that affect the supervisor's judgments. The rest of this section briefly describes these "moderators" in more detail.

Insert Figure 1 here

The most obvious rational factors for helping a manager making attributions have been labeled distinctiveness, consistency, and consensus. Distinctiveness refers to the extent to which a subordinate has performed poorly on other tasks. The less distinctive, the more likely an external attribution. Consistency refers to the extent to which performance has been poor before on this particular task. The more consistency, the more internal the attribution. Finally, consensus refers to the extent to which other subordinates perform poorly at this task. The lower the consensus, the more internal the attribution.

Let's take an example. Suppose a subordinate fails to turn in a budget report on time. The supervisor gathers or recalls the above information and realizes that this subordinate is (1) always tardy in getting in reports, (2) is always late with financial reports, and (3) none of the other subordinates are late. In this case the supervisor is likely to attribute this poor performance to something about the subordinate (e.g., his ability or motivation). If, on the other hand, the subordinate has (1) never missed a deadline before for any task, (2) always get financial reports in on time, and (3) everybody had trouble this particular month with getting their reports in, then an external attribution is likely. Something about the financial situation this month (or perhaps too much work) is the probable attribution.

But, besides these rational, informational cues there are other factors that can influence the attribution. Many of these factors introduce bias into the process. First, and probably most important, is the actor/observer bias. It has been well documented that people think their own behavior tends to be caused by external forces but that the behavior of others is caused by internal factors. The behavior of someone else is

salient to the outside observer, but it is the environment which is salient to the actor. So, a subordinate [actor] explaining the causes of his or her behavior is likely to see it as caused by external events while the supervisor [observer] is likely to see it as caused by internal dispositional factors.

Coupled with the actor/observer error are some self-serving biases. In general, people tend to attribute successes to themselves and failures to forces beyond their control. When we combine these two biases, we can see that in cases of poor performance it is very likely that supervisors will see the causes as internal to the subordinate, while the subordinate will see the cause as external events. This difference in attributions is likely to lead to conflict, disagreement and hard feelings.

There are some other sources of error in this attribution phase. Anything that increases the distance (psychologically and physically) between the supervisor and the subordinate is likely to increase actor/observer and self-serving errors. For example, the less the supervisor likes the subordinate, the less experience the supervisor has with the subordinate's job and the more power the supervisor has, the more the supervisor is likely to make internal attributions for poor performance.

The second link in the model is the decision phase--the supervisor must select a response. Obviously, if an internal attribution has been made, the response is likely to be directed at the subordinate (e.g., reprimand, training) and if an external attribution is made, a response directed at the task will be more appropriate (e.g., provide more support, change the task). Again, there are some rational and less rational factors that affect this response.

On the rational side is the fact that supervisors at this point usually engage in some sort of cost/benefit analysis. That is, they weigh the pros and cons of various responses. They consider such factors as what is the probability of a given response (1) changing the subordinate's behavior, (2) having a positive or negative impact on other employees, (3) making the supervisor feel good, (4) adhering to company policy and so on. These are clearly important inputs to the decision.

But, again, there are some less obvious factors that seem to enter in. For example, there is now considerable evidence that the consequences of the poor performance affect the response by the supervisor.⁷ If the missed deadline for the financial report results in a lost contract, the supervisor is much more likely to be personal and punitive than if nothing negative occurs. In many cases, the subordinate may have no control over the outcome, but yet he or she is treated much more severely when something negative happens than when nothing negative happens.

Another source of bias in the response phase is likely to come from the subordinate in the form of apologies, excuses and external explanations. Even though the supervisor has accurately diagnosed that a subordinate performed poorly because of low motivation, he or she is less likely to be punitive and severe if the subordinate apologizes and promises it will never happen again. It is simply hard for a manager to be severe and punitive with someone who admits their mistake.

⁷ Mitchell, T.R. and Wood, R.E. Supervisors responses to subordinate poor performance: A test of an attributional model. Organizational Behavior and Human Performance, 1980, 25, 123-136. The research demonstrates the types of information that supervisors use and the errors they make when judging a poor performer.

A final source of bias springs partly from the actor/observer error. It seems as if supervisors are less likely to look at and understand ways that a task can be changed. We are much more apt to simply try to change the person rather than the task. This bias is partly caused by the fact that it is somehow easier to tell someone to "be different" than to try to change the environment. And it is also true that we seldom have the appropriate vocabulary or knowledge for dealing with changes in the task.

If one summarizes the implications of what goes on in the two phases we have described, the following conclusions emerge. First, supervisors are likely to see the poor performance of subordinates as internally caused. Second, there is likely to be disagreement about that attribution. Third, there are forces along with the internal attribution (such as outcome knowledge and ease of use) which will push the supervisor towards a personal, punitive response. However, apologies and social or organizational constraints may make it difficult to actually use such responses. Thus we are faced with a situation where a supervisor first of all may unknowingly make some errors of judgment about the causes of poor performance, and then secondly feel frustrated because of certain social or organizational prohibitions about what he or she feels should be done.

One final point needs to be mentioned. There are times when the above process is not used. More specifically, there are certain situations where there exists either a personal or organizational policy to deal with poor performance (e.g., three unexcused absences in a month requires a written reprimand). Under these conditions, the attributional process may not be active, and we have represented this circumstance in our model by having a line directly from the behavior to the response.

Some Empirical Results Supporting the Model

We have conducted a number of studies over the last few years that were designed to test a number of propositions of the model. While a detailed description and review of this research is available elsewhere,⁸ a short summary of what we have done should be helpful.

First, we should point out that the methodologies used have varied widely. We have done critical incident interviews in organizations to gather incidents of poor performance, the type of attributions made and responses used. We have used surveys to ascertain the frequency of types of poor performance and responses. Some of the studies have involved the presentation of cases (based on the incidents) to supervisors in a written form or on film, and the supervisor makes attributions and indicates intended responses. In this type of research we embed our manipulations in the case or film material (e.g., was an apology present or not, was there a serious outcome or not). Finally, some of our studies have been simulations of organizational settings. We have run three studies where we have hired people as subordinates and supervisors to work on clerical type tasks. In these settings the subordinates are either confederates (and one is instructed to perform poorly) or we provide the supervisor with bogus data about performance. Again, we can manipulate information we give to the supervisor such as background data on the subordinates (e.g., their past work history, their ability on the task, their similarity to the leader) or more social factors (e.g., the supervisor's financial dependence on the subordinates' performance, the leader's power).

⁸ Mitchell, T.R., Green, S.G., and Wood, R.E. An attributional model of leadership and the poor performing subordinate: Development and validation. In L.L. Cummings and B.M. Staw (eds.) Research in Organizational Behavior, Vol. 3, JAI Press, 1980. This is a summary of the research work on the attributional model.

In general, the data indicate:

1. That workers do attribute success to internal factors and failure to external factors.
2. That distinctiveness, consistency and consensus affect attributions in the manner predicted.
3. That effort attributions on the part of the supervisor lead to more extreme responses than ability attributions. More specifically, success, when it is attributed to effort, is more highly rewarded than when it is attributed to ability. Failure, when it is attributed to lack of effort, is more severely punished than when it is attributed to low ability.
4. That internal attributions result in more personal and punitive responses directed at the subordinate than external attributions.
5. That negative or severe outcomes as opposed to positive outcomes increase the chances that negative responses will be directed at the subordinate.
6. That apologies on the part of the subordinate decrease the chances that the supervisor will be punitive.
7. That a supervisor who is dependent on the subordinate will want the subordinate to look good to others and will explain poor performance as externally caused.
8. That organizational policies can change or bypass the attributional process and directly dictate a response.

There are a number of implications of this type of model for both theory and practice. But perhaps the most important point to recognize is

that the supervisor is an active processor of information and that a variety of both relevant (e.g., past performance) and nonrelevant (e.g., similarity) cues affect his or her judgment about a subordinate. So, both the definition of poor performance and the manager's interpretation of its cause and response to it have rational and nonrational components. Before turning to a discussion of some ways that we can improve this process, we will briefly describe the process from the subordinate's perspective.

COPING WITH POOR PERFORMANCE: SUBORDINATE PERSPECTIVE

What happens when an individual is confronted with data indicating a serious performance problem? Frequently a sequence of psychological and behavioral events occur.

Deny It

In many cases the first reaction is a cognitive adjustment of denial. The facts are disputed, the actuality or reality is denied or interpreted in a more favorable light or a different mission than the one intended by the evaluator is claimed. The reason that denial is so frequently and so quickly instigated is that it serves to protect, at least momentarily, the performer from loss of esteem, confidence and face. Moreover, if others accept the denial, which may be encouraged by equivocal evidence and ambiguous goals, then the performer does not need to expend time and energy in actually correcting or enhancing his/her performance. On the surface, denial appears to be a reasonable, first-shot strategy for coping with a performance problem. It is a natural reaction by a subordinate or dependent person. Managers should expect it and be prepared to confront it and encourage movement beyond this stage of coping.

Hide It

If denial does not suffice, many problem performers will move from a cognitive adjustment to explicit behavior aimed at hiding, covering or burying the observable symptoms associated with substandard performance. Certainly such behavior may be aimed at shielding the symptoms from the view of the boss. In professional occupations, considerable effort may be extended toward burying poor performance from other evaluators, e.g., peers, public regulators and agency inspectors. Unfortunately, this is not an infrequent response in publicly sensitive professions such as nuclear inspection, medical practice, public accounting and even presidential affairs. This coping strategy represents a recognition that denial is either not possible (i.e., there is too much confirming evidence indicating poor performance) or too risky (i.e., if the evidence were public, previous denial would appear dishonest and stupid). So energy is expended and behavior directed at consciously hiding evidence of poor performance.

Justify It

Let's elevate the coping process one more step. The performance problem cannot be denied (it did happen), it cannot be hidden (the boss, perhaps peers and maybe even the public know), then what? Typically, at this stage, considerable effort will be extended toward justification or rationalization. Most frequently the form of this response is to attempt to diminish the significance of the performance problem. Phillip Caldwell, Ford Motor Company chairman, when confronted by a Wall Street Journal reporter who compared Ford's recent financial losses to Chrysler Corporation's evolving collapse, is reported to have responded, "Ford is a strong company and intends

to remain a secure leader in world automotive production and technology."⁹ In other words, it could be worse. When compared to Chrysler, Ford's performance problems appear minuscule. Caldwell could well have said, "Ford intends to survive on its own, and that's better than Chrysler." Of course, the art of justification in the face of declining performance depends on the creative and selective use of comparisons. Relative to Toyota Motor Company and Nissan Motor Company, Ford looks quite different.

Allocate It

The plot thickens. What happens if denial is denied the poor performer, if substandard performance is public knowledge, and if comparisons to even poorer performers are impossible or unbelievable? Frequently individuals and organizations will adopt the coping strategy of allocating the responsibility for the poor performance to someone else or to an external agent (e.g., a competitor engaging in unfair acts, the government, or an unpredictable adverse twist of nature). Considerable energy is expended dividing up the responsibility for the problem with a noticeable emphasis upon allocations to others: an external attribution. This is the stage of aggressive fault-finding and emotional assertions of blame.

Why These Strategies?

Why are these reactions to performance problems so prevalent? Our analysis suggests at least two fundamental reasons. The first focuses on the nature of performance environments and the manner in which performance goals are typically articulated. The second is because, until recently, managerial and behavioral science knowledge had not produced a well-founded technology for changing and improving human performance that is both valid

⁹ Wall Street Journal, April 16, 1980, p. 2.

(i.e., supported by evidence, experience, and theory) and realistic. But more on this in the next section.

The above four coping strategies are most likely to occur and to exhaust the repertory of a manager's coping strategy when one or more of the following three conditions exist:

1. When statements of desired performance remain ambiguous.
2. When public admission of poor performance is punished (e.g., is politically dangerous).
3. When commitments to specific performance goals are avoided in order to maintain future flexibility and accessibility to opportunism.

So, let's summarize what we've said so far. First, managers often have difficulty with the definition of poor performance. This problem may occur because of poor articulation of goals, conflicting goals, or because of some biases on the part of the supervisor. The evaluation of causes and the choice of responses also has its more rational and less rational components. Using information about the individual's past performance in similar and other settings as well as comparisons with other co-workers can lead to generally accurate assessments of causes. On the other hand, self-serving biases, apologies, and outcome knowledge can lead to inappropriate diagnoses and responses. Finally, to the extent that performance evaluations are seen as arbitrary, ambiguous, and threatening, the subordinate is likely to engage in behavior that will block or diminish the recognition of the problem. Our final section suggests some ways to deal with these processes more effectively.

COPING THROUGH CONSTRUCTIVE PERFORMANCE IMPROVEMENT

Coping with the poor performer involves at least four basic steps.

First, one must determine what it is the employee is required to do on the job. That is, one must answer the question, "What truly is critical for the employee to perform effectively on the job?" As we noted earlier, some methods of identifying poor performance also lead to definitions of desired performance. But some do not! So, in enhancing performance we must go beyond merely identifying what is undesirable to specifying what is better. In the process we can also reduce uncertainty and ambiguity. The second step is to be sure that managers are able to recognize effective performance when they see it occur. Rating errors must be recognized and reduced. Inaccurate appraisals lead to discouragement and apathy on the part of employees. Third, one must engage in the setting of specific performance goals with the employee. Specific goals that are difficult but attainable have been shown repeatedly to lead to effective outcomes. Finally, one must be careful to insure that the consequences for the employee of goal attainment are positive or the goals will not be accepted. What we are suggesting is that 1) a clearer, better definition of performance can be made, 2) rating errors and biases can be recognized and reduced, 3) goals can be set in behavioral or other terms that can be agreed upon, assessed and fair, and 4) commitment to these goals can be attained. The following pages discuss each of these steps in more detail.

Defining Effectiveness

Before one can motivate a person to improve his or her productivity, one must be able to specify what it is the person is to start doing, stop doing, or continue doing. That is, one must be able to define productivity in terms

of what it is an individual employee is to be doing on the job. Traditionally, performance outcomes or traits have been used to evaluate performance, and we have already evaluated their shortcomings. What has recently appeared in the literature is an emphasis on defining effectiveness behaviorally, and it is this procedure which we feel has promise.

Behavioral Measures

Behaviorally based measures of performance can be related more directly to what the employee actually does, and they are more likely to minimize irrelevant factors not under the control of the employee than can cost-related measures or traits. Behavioral measures developed from a systematic job analysis serve as indicators of performance outcomes such as units produced/manhour, attendance, accidents, etc. Great performance outcomes such as high profits do not come about through osmosis. Someone must do something to create them. Behavioral measures based on a thorough job analysis indicate precisely what is being done by an employee to warrant recognition, discipline, transfer, promotion, demotion, or termination. Thus, behavioral measures not only define traits (e.g., initiative) explicitly, but they encompass performance-related outcomes. For example, in the baseball example, coming to work, striking out, and hitting a home run are all observable behaviors. Similarly, reducing costs by 10 percent, selling 52 cars in a month, and turning a report in on time are observable behaviors. What makes behavioral measures desirable from a productivity standpoint is that they measure the individual on things over which he or she has control, and most importantly they specify what the person must do or not do to attain these outcomes. That is, good behavioral criteria specify what the person must do in order to hit a home run, reduce costs by 10 percent, sell 52 cars in a

month, etc.

Developing accurate behavioral measures of performance begins with a thorough job analysis that identifies the strategies that one must follow to impact an organization's bottom line. One of the most frequently used and straightforward job analysis procedures for developing behavioral measures is the critical incident technique (CIT). The CIT involves interviewing people who are aware of the aims and objectives of the job in question, who frequently observe job incumbents on the job, and who are capable of discerning competent from incompetent performance. The interviewees are asked to describe examples of effective and ineffective behavior that they observed in the past 12 months as critical in doing the job effectively. The emphasis on the past 12 months is to insure that the information obtained is applicable to the current needs of the organization. For example, some behaviors that were effective for an engineer in the 1960's may no longer be effective in the 1980's.

In describing effective/ineffective incidents, an interviewee is asked to explain: (a) the circumstances surrounding a specific incident where the behavior was demonstrated; (b) exactly what was done; and (c) how the behavior was effective/ineffective. Critical incidents that are similar, if not identical, are grouped together to form one behavioral item. For example, incidents having to do with a supervisor encouraging subordinates to work effectively with one another were used recently to develop the item: "Verbally praised a subordinate for voluntarily helping another employee on any aspect of the job." Items that are similar are grouped together to form one criterion or yardstick for defining and measuring an employee's effectiveness. For example, items dealing with supervisory involvement with employees might be called, "Interactions with Subordinates." Each behavioral item on the scale contains five points. A rating of one to five depends upon

the frequency with which an employee engages in a behavior. Such scales are referred to as behavioral observation scales (BOS). These scales possess several important advantages in enhancing performance. First, they are typically developed with substantial input from employees. Thus, understanding of and commitment to the measures are facilitated.

Second, BOS make explicit what behaviors are required of an employee in a given job. As a job description, BOS also can be used as a realistic job preview for job candidates by showing them what they will be expected to do on the job. Job previews are an effective means of reducing turnover because they give candidates sufficient knowledge to discern whether they would have the desire and ability to perform consistently the duties of the job.

Third, the BOS facilitate fair appraisals in that they inform both the supervisor and the employee what will be observed on the job. Through the job analysis, the BOS contain a representative sampling of the behaviors critical to performing effectively in the organization.

Finally, BOS facilitate explicit performance feedback in that they encourage meaningful discussions between the supervisor and the employee of the latter's strengths and weaknesses. Generalities are avoided in favor of specific overt behaviors for which the employee is either praised or encouraged to demonstrate on the job. Explicit feedback using BOS combined with the setting of specific goals, to be discussed shortly, has been shown repeatedly to be an effective means for bringing about and/or maintaining a positive behavior change.

Behavioral observation scales, while a preferred strategy for assessing performance, remain subject to human errors in both their development and

administration. Thus, it is important to attempt to minimize these errors.

What strategies are available?

Minimizing Rating Errors

Human judgment enters into every criterion of employee effectiveness regardless of whether the criterion consists of economic, trait, or behavioral measures. Careful observation is a necessity if feedback based on these observations is to serve as a motivator rather than a demotivator. Unfortunately, most organizations assume that the careful construction of performance measures obviates the need for training supervisors how to observe, record, and evaluate objectively what it is they have seen. What makes training a necessity is that observers are usually unaware of rating errors. The end result can be an employee who is erroneously promoted, demoted, transferred, or terminated. Common rating errors include contrast effects, halo, similar-to-me, leniency, and attributional biases.

The contrast effect error is the tendency for a rater to evaluate a person relative to other individuals rather than on the requirements of the job. A typical outcome of this error occurred recently in an organization where an "average" manager in an exceptionally good department was laid off. An equally "average" manager who was doing exactly the same job, but in a poor department, was given additional responsibility and was subsequently promoted. Thus, even though these two individuals were comparable in terms of job performance, one benefited from the mediocrity of peers, while the other one suffered because the peers were outstanding.

Halo error refers to an overgeneralization from one aspect of a person's job performance to all aspects of the person's performance. For example, a person who is outstanding at inventory control may be rated

inaccurately as outstanding on all areas of the job including credit management and customer relations.

The similar-to-me error is a tendency for us to judge more favorably those people who are similar to us in attitudes and background than those people who are dissimilar regardless of whether the similarity is job-related. Leniency errors refer to raters who rate everyone at the high or the low end of the scale.

Finally, as we mentioned before, there are a number of judgment errors based on attributional biases. Supervisors tend to blame subordinates for failure to see the causes of poor performance as internal and be biased favorably by apologies or other irrelevant information (e.g., outcomes).

What makes these errors insidious is that they appear to be well developed rating habits resistant to change. People may continue to make them even when they have received lectures and warnings on why the errors must be avoided. They continue to make them after receiving information on how to spot potential rating errors (e.g., one person is rated on everything favorably; one person rates everyone at the low end of an appraisal scale).

The only training program that is effective in minimizing rating error is one that incorporates three principles of learning that are basic to bringing about a relatively permanent change in behavior. These principles are active participation, knowledge of results, and practice.

A training program that reduces rating errors must allow people to rate individuals during the training program. For example, giving a lecture or showing a film on how to serve a tennis ball is unlikely to increase the skill level of a novice tennis player.

Second, the training program must provide immediate feedback as to the accuracy of the trainee's rating. Discussion can then focus on what the trainee did correctly or incorrectly.

Finally, the training program must allow sufficient time for the trainee to practice the correct behavior. The literature is full of unsuccessful stories of five minute to one hour training programs that produced at best a temporary increase in the observation skills of managers.¹⁰ To the extent that supervisory observations are inadequate, biased, or are reported inaccurately, the probability of stimulating the productivity of the employee is greatly decreased, and the probability of a discrimination charge is significantly increased.

A training program that is effective in reducing rating errors and increasing observer accuracy was developed by Gary Latham and his colleagues.¹¹ In brief, 10-12 people are trained in 6-8 hours. The trainees view job applicants on videotape. They rate a job applicant on the basis of a job description that is given to them prior to observing the applicant. They then receive knowledge of results from the trainer as to the correct rating. Discussion follows as to a) what the applicant was observed doing in the film to justify the rating, b) examples of where each trainee has seen a given rating error made in both job and off-the-job settings, and c) ways to minimize the occurrence of each rating error. The result is an increase in rater validity.

¹⁰ Bernardin, H. J. Effects of rater training on leniency and halo error in student ratings of instructors. Journal of Applied Psychology, 1978, 63, 301-308.

¹¹ See Latham, G. P., Wexley, K. N., and Pursell, E. D. Training managers to minimize rating errors in the observation of behavior. Journal of Applied Psychology, 1975, 60, 550-555; and Pursell, E. D., Dossett, D. L., and Latham, G. P. Obtaining valid predictors by minimizing rating errors in the criteria. Personnel Psychology, 1980, 91-96.

Goal Setting

Once effective or ineffective performance can be described and defined, and supervisors have been trained to recognize and record it accurately, the issue of improving performance can be addressed directly. A fundamental concept indigenous to most, if not all, current theories of performance motivation is goal setting or specifying exactly what it is the individual is to do on the job.

Goal setting is effective because it clarifies exactly what is expected of an individual. As several engineers have commented to us, "by receiving a specific goal from the supervisor we are able to determine for the first time what that * * * really expects from us." Moreover, the process of working against an explicit goal injects interest into the task. It provides challenge and meaning to a job. Through goal attainment, feelings of accomplishment and recognition (from self and/or supervisor) occur.

When setting goals, the following points should be taken into account:¹²

(1) Setting specific goals leads to higher performance than adopting an attitude of "do your best." This means that a specific score on each BOS should be specified along with the key behavior or behaviors that the employee needs to work on to improve or maintain the score.

(2) Employee participation in setting goals generally leads to higher goals being set than is the case where the goal is set unilaterally by a supervisor.

(3) The higher the goal, the higher the performance.

(4) Performance feedback is critical to maintaining employee interest in the job, revising goals, and prolonging effort to attain the goals. Feedback reinforces goal setting.

¹² Latham, G. P. and Locke, E. A. Goal setting: A motivational technique that works. Organizational Dynamics, 1979, Autumn, 68-80.

(5) If employees are evaluated on performance rather than goal attainment, they will continue to set high goals regardless of whether the goals are attained. High goals lead to higher performance levels than easy goals. If employees are evaluated on goal attainment rather than actual performance, they are likely to set low goals or reject hard goals imposed by supervisors.

(6) There must be some latitude for the individual to influence performance. Where performance is rigidly controlled by technology or work flow, such as the typical assembly line, goal setting may have little effect.

(7) Workers must not feel threatened that they will lose their job if they increase their performance under the goal setting procedure. Most people have enough sense not to put themselves out of work by being too productive.

These principles are basic to most MBO programs. The primary difference between what we are saying here and what has been advocated by MBO enthusiasts is that the latter often emphasize the use of cost-related measures (e.g., number of sales) whereas we argue for the use of behavioral measures for counseling/development/motivational purposes. We have no objection to the use of MBO as a vehicle for planning where the organization, department or individual should focus attention and efforts over the next three months, one year, or five years. Nor do we have any objection to the inclusion of these objectives with behavioral measures. Cost-related objectives can clarify the context or situation where the employee's behavior will be appraised. But, it should not be surprising if the two sets of measures lead to different conclusions. For example, there may be environmental factors or organizational constraints that are beyond the control of one employee to influence, and thus are preventing that individual from attaining satisfactory cost-related outcomes. The use of BOS are helpful here because they alert the manager to look for organizational-related obstacles if the employee is doing

everything correctly. In instances where the cost-related measures are satisfactory but the employee's behavior is unsatisfactory, the satisfactory cost-related measures may be short-lived as other employees, subordinates and/or clients respond adversely to this behavior. Remember, cost-related outcomes occur because people in the organization "did something." Accounting for what each person did is the purpose of developing behavioral measures. Finally, cost-related and behavioral measures may not correlate with one another because of recording errors on the part of the appraiser. This is why the training of raters discussed previously is so important.

Insuring Goal Acceptance

A straightforward approach to attempting to understand why an employee does or does not accept a goal is to draw the following diagram:

	Consequences	
	+	-
Desirable Behavior	1	2
Undesirable Behavior	3	4

First, list in cell 1 all the positive consequences that an employee receives as a result of engaging in a desirable behavior (e.g., a mechanic working ten rather than six hours).

Second, list in cell 2 all the aversive consequences or punishers for engaging in this desirable behavior (e.g., fatigue, arriving home late for dinner).

Repeat the above steps regarding the consequences of engaging in undesirable behavior. For an in-depth analysis, repeat these steps by discussing them with the employees themselves. This approach can provide a rational way

for gaining insight and developing hypotheses as to why people behave the way they do. More importantly, it provides a basis for motivating them to do what you want them to do by indicating the consequences that may need to be changed in order to change their behavior. The approach is straightforward and costs little; however, the cost of changing the consequences sometimes exceeds the benefits of changing the behavior. The advantage of this approach is that one can estimate the costs knowing, with a high degree of certainty, that if the consequences are changed, the behavior will change.

This approach was used successfully by Emery Air Freight. Emery found that efficiency was reduced by 45 percent because people on airport loading docks shipped items in the wrong containers. This inefficiency was costing the company over \$1 million annually. Rather than implementing a training program, they examined the positive consequences of loading containers properly to the employee. This analysis revealed that there were no consequences of any kind (i.e., positive or aversive) whatsoever. Moreover, most employees believed they were performing efficiently.

The program required each employee to fill out a behavioral checklist, that is similar in concept to BOS. Goals were set for each job. All employee improvements in performance were reinforced with praise by a supervisor, regardless of whether company goals were attained. Failure to attain a goal was reinforced by praise for honesty in reporting that failure. In this way, behavior was shaped toward the desired goals through praise.

It is important to note that the positive consequences of engaging in a given behavior must be perceived immediately by the employee. If the consequences are not immediate, their effectiveness decreases because the employee does not clearly see the connection between the consequences and the behavior. Even worse, delayed positive consequences may inadvertently reinforce inappropriate behaviors. For example, a new division manager in a start-up

operation may perform initially at a high level. The organization may attempt to reward the manager with a salary increase. Unfortunately, the salary increase may not be approved by the vice president until months later. By this time the manager's high level of performance may have diminished as a result of numerous frustrations. When the salary increase finally occurs, the manager is, in effect, being reinforced for mediocre performance.

So, in summary, a straightforward approach for coping with poor performance and enhancing productivity includes the four following steps:

(1) Define performance behaviorally: The manager must identify and define specific behavior or behaviors that are required of the employee on the job. The behavior must be pinpointed to the extent that it can be reliably observed and recorded. "Showing initiative" is not pinpointed. "Calling on a customer without being asked by anyone" is. The ability to specify behavior in observable terms is the first skill managers must acquire before they can change or maintain an employee's performance.

(2) Train managers to reduce rating errors: Rating errors are errors in judgment that occur in a systematic manner on the part of an observer. What makes these errors so insidious is that observers are usually unaware that they are making them. In those instances where they are aware of the error, they are frequently unable to correct themselves. The end result can be an employee who is erroneously promoted, demoted, transferred or terminated.

(3) Set specific goals: The advantage of involving the employee in goal setting is that it not only can increase an employee's understanding of what is required of the job, but it can lead to the setting of higher goals than is the case where a supervisor sets them unilaterally. The higher the goal, the higher the performance.

(4) In order for goals to be accepted, the employee must perceive that goal attainment will lead to positive consequences.

CONCLUSION

What prescriptions flow from our analysis of reducing performance gaps and enhancing productivity? The three stage process depicted here suggests several guidelines for managerial action:

- 1) Adopt a flexible posture toward identifying performance problems. At times, any one of the three comparisons we have described may be appropriate, but where possible clear specific behavioral goals can be used both for comparisons across time and people. Beyond the comparison processes, the limitations of humans as information processors and decision makers must be recognized and accommodated when attempting to spot performance gaps.
- 2) Fully utilize what is known about how humans identify causes of low performance. Attention to such processes of attribution will facilitate focusing on ways of improving correct problem diagnosis and enhancing the implementation of problem solutions.
- 3) Do not expect that humans will always attack performance problems with constructive, proactive steps aimed at productivity enhancement. It may be necessary to assist managers through the usual coping strategies which so frequently hinder direct confrontation and improvement of substandard performance. That is, pushing beyond denial, cover-up and blame allocation concerning performance gaps may be necessary to directly confront and solve performance problems.

- 4) Follow the steps toward constructive performance enhancement, including behaviorally defining desired outcomes, careful goal setting, evaluation training to reduce assessment errors, feedback and positive rewards for performance improvement.

Clearly, our analysis and prescriptions go well beyond what has been typically associated with traditional performance appraisal systems and techniques. It is our belief that performance definition, diagnosis, appraisal and improvement needs to be firmly anchored in what is currently known about humans as observers of performance, as evaluators and as facilitators of change. Such an orientation provides our best opportunity for advancing beyond generally unproductive and unrealistic techniques and strategies and for improving productivity through the development of an organization's human resources.

Figure 1
A Model of Supervisor's Responses to Poorly Performing Subordinates

